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ABSTRACT

A study was conducted to determine the prevalence of educable mentally retarded, behaviorally disturbed, and learning disabled students in Georgia schools. The research involved two phases: Phase 1, in which students were identified; and Phase 2, in which the original identifications were confirmed. Among findings were that of the total numbers of students enrolled in Georgia public schools during the 1975-76 academic year, 3.1% were behaviorally disturbed, 2.9% were educable mentally retarded, and 4.3% were learning disabled. (Statistical data is presented in table form.) (SBH)

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# REPORT TO THE GEORGIA STATE DEPARTMENT OF EDUCATION

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# PREVALENCE OF EDUCABLE MENTALLY RETARDED, BEHAVIORALLY DISTURBED, AND LEARNING DISABLED PUPILS IN GEORGIA PUBLIC SCHOOLS

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The University of Georgia
under contract with
The Georgia State Board of Education

March, 1977

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## PREFACE

This report is arranged to facilitate use by its intended audience. Section 1, Summary, has the questions we contracted to study and the answers we found. Section 2, Background, has information supporting Section 1.

An incidence study like this can generate a number of criticisms and additional questions. We welcome these criticisms and questions. Given these, we will consider further explorations of the data. In addition, we will solicit critiques from SEA, LEA and university and college personnel. Ultimately, we intend to publish a monograph containing the study per se, discussion of its results, and implications of its results for instruction, administration, and staff development.

People who contributed to this work are named in the Acknowledgment Section. They made the study stronger and I gratefully recognize their contributions. I alone am responsible for all errors of omission and comission.

CLW

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Completion of this study was possible only through a cooperative effort on the part of many persons around the state. Dr. William Swan was involved as Project Co-director prior to his assuming a position at the Bureau for the Education of the Handicapped on February 25, 1977. Others who served in various roles in the study include:

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Ms. Laura Thornton
Ms. Joan Tillman
Ms. Mary Tyler
Mr. David Yeager

In addition to those named above, many others have contributed also. These include: Dr. Jerry Allen, Dr. William Cowan, Ms. Diana Goss, Dr. John Hamilton, Ms. Carol Howell, Dr. Wayne Jones, Dr. Richard Kicklighter, Dr. Ralph McBride, Dr. Katherine McClure, Dr. Herbert Quay, Dr. Florence Rambo, Dr. Bert Richmond, Mr. Roger Selman, Dr. Qaisar Sultana, Dr. Harold Turner, Dr. Robert Vaughn, Dr. Kenneth Wyatt.

Finally, we want to recognize those who made a significant contribution but whom we cannot name here: the 976 pupils, their teachers, and their parents in 251 schools in 14 systems across the state. Without their help, the study would not have been possible.

We are grateful for the support and interest this study has generated. We appreciate the response we have received everywhere.

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## SECTION 1: SUMMARY

Our purpose was to determine the prevalence of educable mentally retarded, behaviorally disturbed, and learning disabled pupils in Georgia public schools. Our questions were:

1. How many educable mentally retarded, behaviorally disturbed, and learning disabled pupils are there in the state-at-large?

2. How many educable mentally retarded, behaviorally disturbed and learning disabled pupils are there in the four major geographical areas--the Metropolitan, the Northern, the South-Cental, and the Coastal?

3. How many educable mentally retarded, behaviorally disturbed, and learning disabled pupils are there at the elementary and secondary school levels?

4. How do the prevalence figures in this study compare with those reported for the nation and in other Georgia studies?

This section has the answers to these questions. Section 2 has the information supporting these answers.

Question 1: How many educable mentally retarded, behaviorally disturbed, and learning disabled pupils are there in the state-at-large?

Table 1

Georgia's Prevalence Figures: State-at-Large

| Handicapped Group | Estimates of Prevalence | Projected number of Georgia pupils* |
|---|---|---|
| Behaviorally Disturbed | 3.125% | 36,066 |
| Educable Mentally Retarded | 2.894% | 33,400 |
| Learning Disabled | 4.282% | 49,419 |

*Based on the total number of pupils enrolled in Georgia public schools during the 1975-76 academic year.

Question 2: How many educable mentally retarded, behaviorally disturbed, and learning disabled pupils are there in the four major geographical areas--the Metropolitan, the Northern, the South-Central, and the Coastal?

Table 2

Prevalence Figures Across Four Geographical Areas

| Handicapped Group | Geographical Area | Estimates of Prevalence State-at-Large | Within Area | Projected Number of Georgia Pupils* |
|---|---|---|---|---|
| Behaviorally Disturbed | Metropolitan | 1.042% | 2.875% | 12,026 |
| | Northern | .810 | 4.094% | 9,348 |
| | South Central | 1.157% | 3.086% | 13,353 |
| | Coastal | .116% | 1.786% | 1,339 |
| Educable Mentally Retarded | Metropolitan | .463% | 1.278% | 5,344 |
| | Northern | .231% | 1.170% | 2,666 |
| | South Central | 1.852% | 4.938% | 21,374 |
| | Coastal | .347% | 5.357% | 4,005 |
| Learning Disabled | Metropolitan | 1.505% | 4.153% | 17,369 |
| | Northern | 1.620% | 8.187% | 18,697 |
| | South Central | .810% | 2.160% | 9.348 |
| | Coastal | .437% | 5.357% | 4,005 |

*Based on the total number of pupils enrolled in Georgia public schools during the 1975-76 academic year.

Question 3: How many educable mentally retarded, behaviorally disturbed, and learning disabled pupils are there at the elementary and secondary levels?

Table 3

The Handicapped Groups by School Levels

| Handicapped Group | CA Level | School Level | Estimates of Prevalence | Projected number of Georgia pupils* |
|---|---|---|---|---|
| Behaviorally Disturbed | 6-0 to 12-5 | Elementary | .347% | 4,005 |
| | 12-6 to 17-11 | Secondary | 2.778% | 32,061 |
| Educable Mentally Retarded | 6-0 to 12-5 | Elementary | 1.042% | 12,026 |
| | 12-6 to 17-11 | Secondary | 1.852% | 21,374 |
| Learning Disabled | 6-0 to 12-5 | Elementary | 1.042% | 12,026 |
| | 12-6 to 17-11 | Secondary | 3.241% | 33,405 |

*Based on the total number of pupils enrolled in Georgia public schools during the 1975-76 academic year.

Question 4: How do the prevalence figures in this study compare with those reported for the nation and in other Georgia studies?

Table 4

Comparison of Prevalence Figures

| Handicapped Group | This Study | National Study[a] | Other Georgia Studies Taylor Co.[b] | DeKalb Co.[c] |
|---|---|---|---|---|
| Behaviorally Disturbed | 3.125% | 2.0% | 3.3% | 1.94% |
| Educable Mentally Retarded | 2.894% | 2.0% | 7.8% | 1.44% |
| Learning Disabled | 4.282% | 3.0% | 5.0% | 1.91% |

[a]Figures supplied by the Georgia State Board of Education

[b]Figures supplied by Dr. Kenneth Wyatt and based on the Taylor County Special Education Needs Assessment Project.

[c]Figures supplied from Dr. William Cowan and based on the DeKalb County System's Guide for the Special Education Information System.

## SECTION 2: BACKGROUND

### Context

This study is part of the Georgia Child Find Project. The goals of Child Find are (a) conducting an actual count of physically handicapped and (b) implementing a prevalence study to determine accurate figures for the various handicapping conditions.

As stated, our purpose was to determine the prevalence of educable mentally retarded, behaviorally disturbed, and learning disabled pupils in Georgia Public Schools. We had four questions:

1. How many educable mentally retarded, behaviorally disturbed, and learning disabled pupils are there in the state-at-large?

2. How many educable mentally retarded, behaviorally disturbed, and learning disabled pupils are there in the four major geographical areas--the Metropolitan, the Northern, the South Central, and the Coastal?

3. How many educable mentally retarded, behaviorally disturbed, and learning disabled pupils are there at the elementary and secondary school levels?

4. How do the prevalence figures in this study compare with those reported for the nation and in other Georgia studies?

### General Procedure

The study had two phases: Identification and Confirmation.

In Phase 1, Identification, we diagnosed pupils as educable mentally retarded, behaviorally disturbed, and learning disabled. To do so, we selected a random sample of pupils and determined how many of this sample were in the three classifications according to criteria and procedures in the state regulations.

We randomly selected pupils from grades 1 - 12 in the four geographical areas. To prevent biased results, we selected school

systems which represented these four regions in population density, economic base, and ethnic group composition and used sample sizes which parallel the proportions in the state. Accurate sampling was crucial. Therefore, we had as consultants, Ms. Elizabeth Todd, Coordinator, Mental Handicaps, Special Education Program, State Department of Education; and Dr. Lawrence Bramblett, Head, Extension Services, College of Business Administration, and Dr. John Netter, Distinguished Professor of Quantitative Methods and Statistics, both of the University of Georgia. In addition, Dr. William Swan, as project Co-director, set up the information presented under sample size determination prior to assuming his position with the Bureau of the Education for the Handicapped on February 28, 1977.

We collected demographic and test information on each pupil in the sample. Then, we identified pupils who are behaviorally disturbed, learning disabled, or educable mentally retarded on the basis of definitions, criteria, and, where available, cutting points specified in the state regulations. We used expert judgments in establishing criteria and cutting points when the state regulations were not specific. State officials approved each expert judgment that went beyond the state regulations.

In Phase 2, Confirmation, we checked the validity of the original identifications. To do so, we obtained additional demographic and test data. Again, we held strictly to state regulations or expert judgments approved by State officials.

## Sampling Procedures

### Sampling Plan

Table 5 shows the sampling plan. We chose the samples in two steps. Within each geographic area, we selected school systems representative of that area. Within each school system, we randomly selected pupils to represent

that area. That is, the proportion of student enrollment in that area determined the sample size in that area. The pupil sample ranged from 6.48 percent (Coastal Area) to 37.50 percent (South Central Area) for the four geographic areas. Therefore, we used a proportional random sampling procedure to select the subjects in each geographic area.

Table 5

Summary of Sampling Plan Descriptors

N=864

| Area | Percent State Enrollment | Pupil Sample Size | Percent Area Enrollment Selected | Sample School Districts | CESA* Areas |
|---|---|---|---|---|---|
| Metropolitan | 36.23% | 313 | .07% | Cobb County | 4 |
| | | | | Decatur City | 4 |
| | | | | DeKalb County | 4 |
| | | | | Marietta City | 4 |
| Coastal | 6.48% | 56 | .07% | Chatham County | 15 |
| Northern | 19.79% | 171 | .07% | Floyd County | 1 |
| | | | | Gainesville City | 3 |
| | | | | Habersham County | 3 |
| | | | | Oglethorpe County | 5 |
| South Central | 37.50% | 324 | .07% | Dougherty County | 18 |
| | | | | Houston County | 8 |
| | | | | Jefferson County | 10 |
| | | | | Lowndes County | 17 |
| | | | | Valdosta City | 17 |

*Coordinated Educational Service Agency

A proportional, randomly selected sample of 864 subjects was tested. The sample size provides for estimating the Georgia prevalence rate with a 98 percent confidence interval for results. Considering the total population, the sample size for each geographic area was approximately .07 percent of the total school-age population. And so, .07 percent of each of the four geographic areas was randomly selected for inclusion in Subproject 1. The sample sizes for the four geographic areas are in Table 5.

We used a series of random numbers (from a table of random numbers) to select as subjects pupils within grades 1 - 12 in the selected districts. When we could not locate the first pupil chosen by this method, or obtain parental permission to test, we substituted the next pupil of the same age, sex and race appearing alphabetically on the teacher's register. Tables 6 and 7 show the distribution of our sample by grades and race.

Sample Size Determination

The sample size was based on the following parameters and the subsequent calculations:

1. The "true" national prevalence rate ($P_o$), as specified in the national prevalence figures, for the three areas of exceptionality is 7% (Behavior Disorders = 2%; Specific Learning Disabilities = 3%; Educable Mentally Retarded = 2%). (Source: State Department of Education.)

2. The Georgia Prevalence Rate (P) for the three areas of exceptionality was anticipated to be within 2% of the national prevalence rate ($P_o$) based on the following:

   a. the definitions of the three areas of exceptionality as specified in the Georgia Department of Education's Special Education Rules and Regulations (1975);

   b. the existing knowledge, both published and unpublished, concerning prevalence figures for Georgia;

Table 6

Sample by Grade Expectancy Based on Chronological Age

| Grade Level | Geographical Area: South-Central | Metro-politan | Northern | Coastal | Total by Grade |
|---|---|---|---|---|---|
| 1 | 40 | 32 | 20 | 3 | 95 |
| 2 | 33 | 40 | 17 | 4 | 94 |
| 3 | 33 | 21 | 14 | 8 | 76 |
| 4 | 25 | 28 | 24 | 4 | 81 |
| 5 | 23 | 35 | 8 | 6 | 72 |
| 6 | 24 | 29 | 19 | 6 | 78 |
| 7 | 33 | 30 | 19 | 4 | 86 |
| 8 | 30 | 21 | 8 | 6 | 65 |
| 9 | 24 | 24 | 14 | 6 | 68 |
| 10 | 21 | 23 | 12 | 5 | 61 |
| 11 | 23 | 17 | 7 | 2 | 49 |
| 12 | 15 | 13 | 9 | 2 | 39 |
| Total by Area | 324 | 313 | 171 | 56 | 864 |

Table 7

Sample by Sex and Race

| Area | White M | White F | Black M | Black F | Oriental M | Oriental F | Total by Area |
|---|---|---|---|---|---|---|---|
| South-Central | 84 | 68 | 90 | 81 | | 1 | 324 |
| Metropolitan | 120 | 122 | 35 | 35 | 1 | | 313 |
| Northern | 55 | 78 | 23 | 15 | | | 171 |
| Coastal | 11 | 9 | 17 | 19 | - | - | 56 |
| Total by Sex | 270 | 277 | 165 | 150 | 1 | 1 | 864 |

c. the expectation of some variation in prevalence rates between individual regions and/or individual school districts in Georgia.

3. It was necessary and desirable to establish a stringent level of confidence (98% confidence interval) around the estimates of prevalence due to the potential impact of this study.

4. If the sample size (N) is sufficiently large (greater than 250), the sampling distribution of the proportion (prevalence rate) is approximately normally distributed (via the Central Limit Theorem) and the following relationship with the standard normal distribution is valid:

$$z = \frac{P - P_o}{\sqrt{\frac{P_o(1-P_o)}{N}}}$$

[Dixon, W. J., and Massey, F. J., Jr. Introduction to Statistical Analysis, McGraw-Hill, 1957, pg. 230.

Also contained with same formulation in alternative notation format in: Sturr, F. and Bonini, A. Statistical Analysis for Business Decisions, New York, Irwin, 1967, pg. 307.]

Now solving the above equation for "N" (the sample size):

$$z = \left(\sqrt{\frac{P_o(1-P_o)}{N}}\right) = P - P_o$$

$$z^2 = \left(\frac{P_o(1-P_o)}{N}\right) = (P-P_o)^2$$

$$\left(\frac{P_o(1-P_o)}{N}\right) = N\,(P-P_o)^2$$

$$N(P-P_o)^2 = z^2(P_o(1-P_o)$$

$$N = \frac{z^2(P_o(1-P_o)}{(P-P_o)^2}$$

5. Based on the specification of the paramaters $P_o$ $P-P_o$ and L , N can be determined via the relationship in "4" above:

$P_o$= 7%; $P-P_o$= ± 2%

= ± 2.304 (.02 Level of Significance, two-tailed; directly related to 98% Confidence Interval.)

and ± 2.304

$$N = \frac{(2.304)^2 (.07) (.93)}{(\pm .02)^2} = \frac{(5.3084) (.0651)}{(.004)}$$

= 863.95

N= 864

Thus, with a randomly selected sample of 864 from the population, one can obtain a prevalence rate with a 98% Confidence Interval.

## Classification Procedures

We identified pupils as educable mentally retarded, learning disabled, or behaviorally disturbed by particular defining characteristics, instruments, and inclusion criteria derived from material in the state regulations. The instruments are listed in Table 8.

Table 8

Instruments

| | Group | Instrument | Respondent |
|---|---|---|---|
| Phase 1 Identification | Total | Teacher Evaluation Form | Teacher |
| | | Quay-Peterson Behavior Problem Checklist | Teacher |
| | | Walker Problem Behavior Checklist--Elementary Only | |
| | | Wechsler Intelligence Scale for Children Revised or Adult Intelligence Scale | Pupil |
| | | Wide Range Achievement Test: Reading, Math, Spelling | Pupil |
| Phase 2 Confirmation | MR | American Association on Mental Deficiency Adaptive Behavior Scale | Teacher In interview by trained test administrators |
| | ED | Developmental Therapy Objectives Rating Form | |
| | LD | Peabody Picture Vocabulary Test | Pupil |
| | | Test of Auditory Discrimination (Goldman, Fristoe, Woodcock) | Pupil |
| | | Words per minute (Stanford-Binet) | Pupil |
| | | Bender-Gestalt Visual Motor Test | Pupil |

Details are presented below by group.

Behaviorally Disturbed Group

The Special Education Regulations and Procedures (1976, p. 25) has this information:

Definition

When defined in terms of school functioning, a child would be said to be behavior disordered if his behavior is so inappropriate or destructive to himself or others that it interferes with receiving all or part of his education in the regular classroom situation. The child's primary difficulty is emotional/behavioral and cannot be explained satisfactorily by any other handicapping condition.

Eligibility and Placement Criteria

Based upon appropriate 1) screening, 2) diagnostic information which may need to include a psychological evaluation, and 3) staffing, one or more of the following factors exhibited by the student may be regarded as reasons for referral to or placement in a behavior disorders program.

a. Displayed maladaptive reactions toward peers and authority figures.

b. Temporary or transitory disorders occasioned by crisis situations with the family.

c. Chronic acting out or withdrawal behaviors exhibited in the school setting.

d. History of school suspensions or expulsion.

e. Social maladjustment, as evidenced by adjudication through the courts, or other involvement with correctional agencies.

Table 9 includes the defining characteristics, instruments, and inclusive criteria for the behaviorally disturbed group.

Educable Mentally Retarded Group

The Special Education Regulations and Procedures (1976, p. 23) states:

Definition

> Mental Retardation refers to significantly subaverage general intellectual functioning, existing concurrently with deficits in adaptive behavior and manifested during the developmental period. Significantly, subaverage refers to performance which is more than two standard deviations below the mean of the tests utilized.

Eligibility and Placement Criteria

> The educable mentally retarded individual has the potential for personal, social and emotional growth leading to independent, productive living.
>
> For a child to be eligible for placement into a program for the educable mentally retarded, his performance on the individually administered psychological examination shall range between two and three standard deviations below the mean of the tests utilized. Further significant deficits in his adaptive behavior must be demonstrated.

Table 10 includes defining characteristics, instruments, and inclusion criteria for the educable mentally retarded group.

Learning Disabled Group

The Special Education Regulations and Procedures (1976, p.26) states:

Definition

> The term learning disability refers to one or more significant deficits in the essential learning processes involved in using spoken or written language. These may be manifested in disorders of listening, thinking, reading, writing, spelling or arithmetic. They do not include learning disabilities which are due primarily to visual, hearing or motor handicaps; to mental retardation, emotional disturbance or environmental disadvantages.

Eligibility and Placement

> For a child to be eligible for placement into a program for specific learning disabilities:

Table 9

Classification Guide: Behaviorally Disturbed Group

| Defining Characteristic | Measure | Inclusion Criterion |
|---|---|---|
| **Effect** | | |
| Academic underachievement | Wide Range Achievement Tests:<br>Reading<br>Spelling<br>Arithmetic | At 7th grade or higher 2 or more years below CA expectancy level in two or more areas; at 4th through 6th grades, 1½ years below; at 1st through 3rd grades, ½ year below. |
| and | | |
| Maturational lag | Developmental Therapy Objectives Rating Form<br>Behavior<br>Communication<br>Socialization | Expert judgment as being more than one stage below CA group in at least two areas or two stages below in one area |
| **Cause** | | |
| Emotional/behavioral difficulty | Quay Peterson Behavior Problem Checklist | Two or more standard deviations above the mean for CA, sex, and race group |
| | Phase 1:<br>Teacher Questionnaire | Teacher judgment as being behaviorally disturbed |
| | Phase 2:<br>Teacher Assessment on Significant Factors | Teacher judgment as exhibiting one or more of the six state eligibility factors |
| **Not Cause** | | |
| Other primary handicapping condition | Teacher Questionnaire | Teacher judgment of no other primary handicap. |

Table 10

Classification Guide: Educable Mentally Retarded Group

| Defining Characteristic | Measure | Inclusion Criterion |
|---|---|---|
| **Effect** | | |
| Significant Adaptive Behavior Deficits | Wide Range Achievement Tests:<br>Reading<br>Spelling<br>Arithmetic | 2 or more years below CA expectancy level in all areas. |
| | American Association on Mental Deficiency Adaptive Behavior Scale: Lambert Revision Public School Norms | Scores falling below the 5th Decile for CA expectancy level on at least 50% of the factors. |
| **Cause** | | |
| Subaverage general intellectual functioning | Wechsler Intelligence Scale for Children-Revised<br>or<br>Wechsler Adult Intelligence Scale | Between 2 and 3 standard deviations below the mean |
| **Not Cause** | | |
| Other handicapping conditions | Teacher Questionnaire | Teacher judgment as being no other primary handicap |
| | Quay Peterson Behavior Problem Checklist | Less than 2 standard deviations above the mean for CA, sex, and race group |

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a. There is evidence resulting from the individual psychological evaluation that the child's general cognitive abilities are average or near average.

b. Evidence must be exhibited of a significant disability in one or more of the following areas.

(1) Visual processing (perception, memory, association)

(2) Auditory processing (perception, memory, association)

(3) Language (receptive, expressive)

(4) Sensory integration

Table 11 includes defining characteristics, instruments, and inclusion criteria for the LD group.

Table 11

Classification Guide: Learning Disabled Group

| Defining Characteristics | Measure | Inclusion Criteria |
|---|---|---|
| **Effect** | | In one or more areas: with $\frac{(2ma+ca)}{3}$ formula: |
| Academic underachievement | Wide Range Achievement Tests:<br>Reading<br>Spelling<br>Arithmetic | At 7th grade and above, $<$16th Percentile; 4th through 6th grade, $<$20th Percentile; and 1st through 3rd grades, $<$24th Percentile |
| **Cause** | | |
| One or more significant deficits in the essential learning processes involved in spoken or written language: | | |
| Visual processing | Bender Visual Motor Gestalt Test | $\geq$1 SD above the mean on errors for CA expectancy |
| Auditory processing | Goldman-Fristoe-Woodcock Test of Auditory discrimination | $\leq$30 Percentile on either Noise or Quiet Subtest |
| Language | Peabody Picture Vocabulary Test | Expert Judgment |
| | Words Per Minute | $<$10 CA, fewer than 20 wds. total<br>$>$10 CA, fewer than 30 wds. total |
| Sensory integration | WISC-R Triad (Coding, Digit Span, Picture Arrangement) | $<$29 Combined Score |

Table 11

Classification Guide: Learning Disabled Group, Continued

| Defining Characteristics | Measure | Inclusion Criteria |
|---|---|---|
| Not Cause | | |
| Effects cannot be due primarily to: | | |
| Mentally Retarded | Weschler Intelligence Scale for Children-Revised<br>or<br>Weschler Adult Intelligence Test | ≥ 90 Full Scale IQ |
| Emotional disturbance | Quay-Peterson Behavior Problem Checklist | > 2 SD above mean |
| Environmental disadvantaged | Teacher Questionnaire | Teacher judgment |
| Visual or hearing handicap | Teacher Questionnaire | Teacher judgment |
| Motor handicaps | Teacher Questionnaire | Teacher judgment |

## Results

To recapitulate: Our purpose was to determine the prevalence of educable mentally retarded, behaviorally disturbed, and learning disabled pupils in Georgia schools. Our questions were:

1. How many educable mentally retarded, behaviorally disturbed, and learning disabled pupils are there in the state at large?
2. How many educable mentally retarded, behaviorally disturbed and learning disabled pupils are there in the four major geographical areas--the Metropolitan, the Northern, the South Central, and the Coastal?
3. How many educable mentally retarded, behaviorally disturbed, and learning disabled pupils are there at the primary and secondary school levels?
4. How do the prevalence figures in this study compare with those reported for the nation and in other Georgia studies?

To answer these questions we carred out a two-phase study. In Phase 1, we identified pupils, in Phase 2, we confirmed the original identifications.

The results after Phase 2 are summarized below. This summary is the same as that in Section 1.

Question 1: How many educable mentally retarded, behaviorally disturbed, and learning disabled pupils are there in the state-at-large?

Table 12

Georgia's Prevalence Figures: State-at-Large

| Handicapped Group | Estimates of Prevalence | Projected number of Georgia pupils* |
|---|---|---|
| Behaviorally Disturbed | 3.125% | 36,066 |
| Educable Mentally Retarded | 2.894% | 33,400 |
| Learning Disabled | 4.282% | 49,419 |

*Based on the total number of pupils enrolled in Georgia public schools during the 1975-76 academic year.

Question 2: How many educable mentally retarded, behaviorally disturbed, and learning disabled pupils are there in the four major geographical areas--the Metropolitan, the Northern, the South Central, and the Coastal?

Table 13

Prevalence Figures Across Four Geographical Areas

| Handicapped Group | Geographical Area | Estimates of Prevalence State-at-Large | Within Area | Projected Number of Georgia Pupils* |
|---|---|---|---|---|
| Behaviorally Disturbed | Metropolitan | 1.042% | 2.875% | 12,026 |
| | Northern | .810% | 4.094% | 9,348 |
| | South Central | 1.157% | 3.086% | 13,353 |
| | Coastal | .116% | 1.786% | 1,339 |
| Educable Mentally Retarded | Metropolitan | .463% | 1.278% | 5,344 |
| | Northern | .231% | 1.170% | 2,666 |
| | South Central | 1.852% | 4.938% | 21,374 |
| | Coastal | .347% | 5.357% | 4,005 |
| Learning Disabled | Metropolitan | 1.505% | 4.153% | 17,369 |
| | Northern | 1.620% | 8.187% | 18,697 |
| | South Central | .810% | 2.160% | 9,348 |
| | Coastal | .437% | 5.357% | 4,005 |

*Based on the total number of pupils enrolled in Georgia public schools during the 1975-76 academic year.

Question 3: How many educable mentally retarded, behaviorally disturbed, and learning disabled pupils are there at the elementary and secondary levels?

Table 14

The Handicapped Groups by School Levels

| Handicapped Group | CA Level | School Level | Estimates of Prevalence | Projected number of Georgia pupils* |
|---|---|---|---|---|
| Behaviorally Disturbed | 6-0 to 12-5 | Elementary | .347% | 4,005 |
| | 12-6 to 17-11 | Secondary | 2.778% | 32,061 |
| Educable Mentally Retarded | 6-0 to 12-5 | Elementary | 1.042% | 12,026 |
| | 12-6 to 17-11 | Secondary | 1.852% | 21,374 |
| Learning Disabled | 6-0 to 12-5 | Elementary | 1.042% | 12,026 |
| | 12-6 to 17-11 | Secondary | 3.241% | 33,405 |

*Based on the total number of pupils enrolled in Georgia public schools during the 1975-76 academic year.

Question 4: How do the prevalence figures in this study compare with those reported for the nation and in other Georgia studies?

Table 15

Comparison of Prevalence Figures

| Handicapped Group | This Study | National Study[a] | Other Georgia Studies Taylor Co.[b] | DeKalb Co.[c] |
|---|---|---|---|---|
| Behaviorally Disturbed | 3.125% | 2.0% | 3.3% | 1.94% |
| Educable Mentally Retarded | 2.894% | 2.0% | 7.8% | 1.44% |
| Learning Disabled | 4.282% | 3.0% | 5.0% | 1.91% |

[a]Figures supplied by the Georgia State Board of Education

[b]Figures supplied by Dr. Kenneth Wyatt and based on the Taylor County Special Education Needs Assessment Project

[c]Figures supplied by Dr. William Cowan and based on the DeKalb County System's Guide for the Special Education Information System.

## Restrictions

Any study has restrictions. So does this one. Therefore, we point out the following.

1. SEA officials stipulated that our sample's ethnic ratio parallel that of the State, 60% whites and 40% blacks. The sampling plan required complete random sampling procedures. The initial sampling yielded 976 pupils. In this sample, the ratio of whites and blacks did not meet the 60:40 requirement. Therefore, we randomly excluded 112 white pupils from this sample, reducing it to 864 pupils. Our ratio then was 63%/37%, which we considered as meeting the intent of the stipulation.

2. Our study was limited to educable mentally retarded pupils. Therefore, the pupils enrolled in classes for the trainable were excluded from eligibility in our randomly selected sample.

3. Of our sample, 2% met inclusion criteria for both the mentally retarded and behaviorally disturbed groups. The project's time and funding limitations, as well as the state of the art, prevented further efforts to determine the primary handicapping condition in these cases. Therefore, we identified these pupils as multiple handicapped and excluded them from our prevalence figures for both groups.

4. Definitions of learning disabled were in dispute at the time of the study. We were instructed by state officials to use the definition in their regulations and not to use the criteria stipulated in the proposed Federal regulations for P.L. 94-142 which are now being reviewed in public hearings and still subject to change.

5. In establishing cutting points for academic achievement we used the inclusion criteria described earlier. These were logically established through expert judgment. However, these and other cutting points should be considered in interpreting our results and in educational planning for the three handicapped groups.

In addition to these restrictions, we must remember that any generalizations pertain only to pupils in populations similar to those sampled. Tables 16-23 portray important characteristics of the populations sampled in this study. These characteristics are sex, race, free lunch program eligibility, special services, parents' marital status, and number of siblings.

Table 16

Means and Standard Deviations for Georgia Pupils
On the Quay Peterson Behavior Problem Checklist

N=434

| | Factor I Conduct Problem | | Factor II Personality Problem | | Factor III Inadequacy-Immaturity | | Factor IV Socialized Delinquency | |
|---|---|---|---|---|---|---|---|---|
| | Mean | Standard Deviation | Mean | Standard Deviation | Mean | Standard Deviation | Mean | Standard Deviation |
| **Grades 1-3** | | | | | | | | |
| M/W | 2.419 | 2.849 | 3.161 | 3.541 | 2.194 | 2.227 | .258 | .631 |
| M/B | 4.000 | 5.000 | 3.842 | 3.532 | 3.263 | 2.232 | .421 | .961 |
| F/W | 1.119 | 2.015 | 3.452 | 3.387 | 1.024 | 1.423 | .048 | .216 |
| F/B | 3.769 | 4.969 | 3.615 | 3.572 | 1.692 | 2.175 | .538 | .877 |
| Total Group | 2.352 | 3.533 | 3.457 | 3.439 | 1.857 | 2.077 | .238 | .643 |
| **Grades 4-6** | | | | | | | | |
| M/W | 3.200 | 4.262 | 3.229 | 3.154 | 1.771 | 1.848 | .314 | .932 |
| M/B | 5.500 | 3.823 | 4.000 | 2.765 | 2.444 | 1.854 | .667 | .970 |
| F/W | 1.211 | 2.811 | 2.421 | 3.477 | .842 | 1.636 | .237 | .852 |
| F/B | 2.182 | 2.737 | 3.182 | 2.575 | 1.455 | 1.438 | .273 | .456 |
| Total Group | 2.699 | 3.727 | 3.071 | 3.116 | 1.504 | 1.773 | .336 | .841 |
| **Grades 7-9** | | | | | | | | |
| M/W | 2.528 | 3.946 | 2.917 | 3.620 | 1.972 | 2.432 | .306 | .577 |
| M/B | 3.733 | 3.947 | 3.433 | 2.738 | 2.367 | 2.512 | .633 | .999 |
| F/W | 1.024 | 2.214 | 2.738 | 3.284 | 1.000 | 1.725 | .119 | .328 |
| F/B | 2.000 | 3.127 | 5.368 | 3.041 | 2.368 | 1.571 | .421 | .769 |
| Total Group | 2.219 | 3.450 | 3.328 | 3.309 | 1.797 | 2.175 | .336 | .691 |
| **Grades 10-12** | | | | | | | | |
| M/W | 1.563 | 2.758 | 2.094 | 3.206 | .938 | 1.585 | .313 | .693 |
| M/B | 5.462 | 5.825 | 4.077 | 3.226 | 2.154 | 1.819 | 1.231 | 1.691 |
| F/W | .760 | 1.562 | 2.080 | 2.197 | 1.360 | 1.934 | .160 | .374 |
| F/B | 3.875 | 4.334 | 3.125 | 3.344 | 2.063 | 1.879 | .500 | .894 |
| Total Group | 2.314 | 3.811 | 2.547 | 2.985 | 1.430 | 1.825 | .430 | .940 |

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Question: How many mentally retarded, emotionally disturbed and learning disabled boys and girls are there in the state at large?

Table 17

The Handicapped Groups by Sex

| Handicapped Group | Sex | Estimates of Prevalence |
|---|---|---|
| Behaviorally Disturbed | Male | 1.620% |
| | Female | 1.505% |
| Educable Mentally Retarded | Male | 1.389% |
| | Female | 1.505% |
| Learning Disabled | Male | 2.894% |
| | Female | 1.389% |

Question: How many mentally retarded, behaviorally disturbed, and learning disabled white and black pupils are there in the state-at-large?

Table 18

The Handicapped Groups by Race

| Handicapped Group | Race | Estimates of Prevalence State | Race |
|---|---|---|---|
| Behaviorally Disturbed | White | 1.736% | 2.742% |
| | Black | 1.389% | 3.810% |
| | Other | -- | -- |
| Educable Mentally Retarded | White | .579% | .914% |
| | Black | 2.315% | 6.349% |
| | Other | -- | -- |
| Learning Disabled | White | 3.241% | 5.119% |
| | Black | 1.042% | 2.857% |
| | Other | -- | -- |

Question: How many mentally retarded, behaviorally disturbed and learning disabled pupils are eligible for Federally funded free or reduced lunch programs?

Table 19

The Handicapped Groups by Lunch Program Eligibility

| Handicapped Group | Eligibility | Estimates of Prevalence |
|---|---|---|
| Behaviorally Disturbed | Not eligible for free lunch program | 1.273% |
| | Eligible for reduced lunch program | .116% |
| | Eligible for free lunch program | 1.736% |
| Educable Mentally Retarded | Not eligible for free lunch program | .347% |
| | Eligible for reduced lunch program | .116% |
| | Eligible for free lunch program | 2.431% |
| Learning Disabled | Not eligible for free lunch program | 3.588% |
| | Eligible for reduced lunch program | -- |
| | Eligible for free lunch program | .694% |

Question: How many mentally retarded, behaviorally disturbed, and learning disabled pupils are receiving special services?

Table 20

The Handicapped Groups by Pupils Receiving Special Services

| Handicapped Group | Special Services | Estimates of Prevalence | Estimated Number of Georgia Pupils* |
|---|---|---|---|
| Behaviorally Disturbed | Speech Therapy | .116% | 1,339 |
| | EMR Class | -- | -- |
| | LD Class | -- | -- |
| | Tutor | -- | -- |
| | Remedial Reading | -- | -- |
| | Remedial Mathematics | -- | -- |
| | Remedial Reading and Math | -- | -- |
| | None | 2.778% | 32,061 |
| | Other | .231% | 2,666 |
| Educable Mentally Retarded | Speech Therapy | .231% | 2,666 |
| | EMR Class | .694% | 8,010 |
| | LD Class | .116% | 1,339 |
| | Tutor | -- | -- |
| | Remedial Readi | .231% | 2,666 |
| | Remedial Mathematics | -- | -- |
| | Remedial Reading and Math | .116% | 1,339 |
| | None | 1.505% | 17,369 |
| | Other | -- | -- |
| Learning Disabled | Speech Therapy | -- | -- |
| | EMR Class | -- | -- |
| | LD Class | .347% | 4,005 |
| | Tutor | -- | -- |
| | Remedial Reading | -- | -- |
| | Remedial Mathematics | -- | -- |
| | Remedial Reading and Math | -- | -- |
| | None | 3.935% | 45,415 |
| | Other | -- | -- |

*Based on the total number of pupils enrolled in Georgia public schools during the 1975-76 academic year.

**Question:** How do teachers of mentally retarded, behaviorally disturbed, and learning disabled pupils perceive such pupils' handicaps?

Table 21

**The Handicapped Groups by Teacher Evaluations of Primary Handicapping Conditions**

| Handicapped Group | Handicapping Condition | Prevalence | Estimated Number of Georgia Pupils* |
|---|---|---|---|
| Behaviorally Disturbed | Learning Disabled | 1.505% | 17,369 |
| | Mentally Retarded | .116% | 1,339 |
| | Behavior Disorders | .926% | 10,687 |
| | Deprived Background | -- | -- |
| | Visually Impaired | -- | -- |
| | Hearing Impaired | -- | -- |
| | Language Impaired | -- | -- |
| | Other | .231% | 2,666 |
| Educable Mentally Retarded | Learning Disabled | 1.042% | 12,026 |
| | Mentally Retarded | 1.042% | 12,026 |
| | Behavior Disorders | .347% | 4,005 |
| | Deprived Background | .231% | 2,666 |
| | Visually Impaired | -- | -- |
| | Hearing Impaired | -- | -- |
| | Language Impaired | .116% | 1,339 |
| | Other | .231% | 2,666 |
| Learning Disabled | Learning Disabled | .810% | 9,348 |
| | Mentally Retarded | -- | -- |
| | Behavior Disorders | .116% | 1,339 |
| | Deprived Background | -- | -- |
| | Visually Impaired | -- | -- |
| | Hearing Impaired | -- | -- |
| | Language Impaired | -- | -- |
| | Other | .231% | 2,666 |

Question: What is the parental marital status of mentally retarded, behaviorally disturbed, and learning disabled pupils?

Table 22

The Handicapped Groups by
Parental Marital Status

| Handicapped Group | Parental Marital Status | Estimate of Prevalence |
|---|---|---|
| Behaviorally Disturbed | Married | 1.736% |
| | Unmarried | .231% |
| | Unknown | .579% |
| | Divorced | .231% |
| | Separated | .116% |
| | Mother deceased | .116% |
| | Father deceased | -- |
| | Stepfather | .116% |
| | Stepmother | -- |
| | Guardians | -- |
| Educable Mentally Retarded | Married | 1.505% |
| | Unmarried | -- |
| | Unknown | .231% |
| | Divorced | .347% |
| | Separated | .347% |
| | Mother deceased | -- |
| | Father deceased | .116% |
| | Stepfather | .231% |
| | Stepmother | -- |
| | Guardians | .116% |
| Learning Disabled | Married | 3.125% |
| | Unmarried | -- |
| | Unknown | .231% |
| | Divorced | .231% |
| | Separated | .116% |
| | Mother deceased | .231% |
| | Father deceased | .116% |
| | Stepfather | .231% |
| | Stepmother | -- |
| | Guardians | -- |

Question: How many siblings do mentally retarded, behaviorally disturbed, and learning disabled pupils have?

Table 23

The Handicapped Groups by Number of Siblings

| Handicapped Group | Number of Siblings | Estimate of Prevalence |
|---|---|---|
| Behaviorally Disturbed | 0 | .116% |
| | 1 or 2 | 1.042% |
| | 3 or 4 | .694% |
| | 5 or 6 | .694% |
| | 7 or 8 | .463% |
| | 9 or more | .116% |
| Educable Mentally Retarded | 0 | .231% |
| | 1 or 2 | .579% |
| | 3 or 4 | .579% |
| | 5 or 6 | 1.273% |
| | 7 or 8 | -- |
| | 9 or more | .231% |
| Learning Disabled | 0 | .463% |
| | 1 or 2 | 1.620% |
| | 3 or 4 | 1.736% |
| | 5 or 6 | .231% |
| | 7 or 8 | .116% |
| | 9 or more | .116% |